

3094-30

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Yukuo KATAYAMA

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Art Unit: N/A

For: **METHOD FOR THE GASIFICATION OF COAL**

Examiner: N/A

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PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

S I R:

Prior to any action, kindly amend the above referenced application as follows:

In the claims:

Please rewrite claims 3 – 6 and 9 – 11 as follows:

Claim 3 (Amended). The method according to claim 1, wherein oxygen is introduced in an amount of 0.3 to 1.1 times as much as a required molar amount of oxygen calculated by subtracting a molar amount of oxygen in the feed coal from a half of the molar amount of carbon in the feed coal.

Claim 4 (Amended). The method according to claim 1, wherein the steam is introduced in an amount of 0.15 to 0.6 time as much as a weight of the coal used in the gasification.

Claim 5 (Amended). The method according to claim 1, wherein the gasification is performed at a pressure of from 15 to 80 kg/cm².

Claim 6 (Amended). The method according to claim 1, wherein pulverized coal is supplied to gasification reactor by a pneumatic transportation method using carbon dioxide, nitrogen, or hydrogen, or by a water slurry method.

Claim 9 (Amended). The method according to claim 7, wherein hydrogen is introduced in an amount of from 2 to 3 times as much as a required molar amount of oxygen calculated by

subtracting a molar amount of oxygen in the feed coal from a half of the molar amount of carbon in the feed coal.


Claim 10 (Amended). The method according to claim 7, wherein the temperature of steam is in the range of from 2000 to 2700 °C.

Claim 11 (Amended). The method according to claim 1, wherein the electrolysis of water is carried out using an electric power generated by wind power, waterpower, or the solar energy.

Remarks

The present amendment is submitted upon filing the present application to conform the claims to U.S. practice. Marked up versions of the amended claims are included in an Appendix attached hereto. An early action on the merits is now respectfully requested.

Respectfully submitted,


GERALD LEVY
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APPENDIX

Claim 3 (Amended). The method according to claim 1 [or 2], wherein oxygen is introduced in an amount of 0.3 to 1.1 times as much as a required molar amount of oxygen calculated by subtracting a molar amount of oxygen in the feed coal from a half of the molar amount of carbon in the feed coal.

Claim 4 (Amended). The method according to [any one of claims 1 to 3] claim 1, wherein the steam is introduced in an amount of 0.15 to 0.6 time as much as a weight of the coal used in the gasification.

Claim 5 (Amended). The method according to [any one of claims 1 to 4] claim 1, wherein the gasification is performed at a pressure of from 15 to 80 kg/cm².

Claim 6 (Amended). The method according to [any one of claims 1 to 5] claim 1, wherein pulverized coal is supplied to gasification reactor by a pneumatic transportation method using carbon dioxide, nitrogen, or hydrogen, or by a water slurry method.

Claim 9 (Amended). The method according to claim 7 [or 8], wherein hydrogen is introduced in an amount of from 2 to 3 times as much as a required molar amount of oxygen calculated by subtracting a molar amount of oxygen in the feed coal from a half of the molar amount of carbon in the feed coal.

Claim 10 (Amended). The method according to [any one of claims 7 to 9] claim 7, wherein the temperature of steam is in the range of from 2000 to 2700 °C.

Claim 11 (Amended). The method according to [any one of claims 1 to 10] claim 1, wherein the electrolysis of water is carried out using an electric power generated by wind power, waterpower, or the solar energy.